Blue Team Module 0:
Getting Started with Virtualization

Introduction:
Virtualization technology allows a user to emulate an operating system at the software level abstract from underlying hardware. For us, this means we can run an operating system like linux from our Desktop!

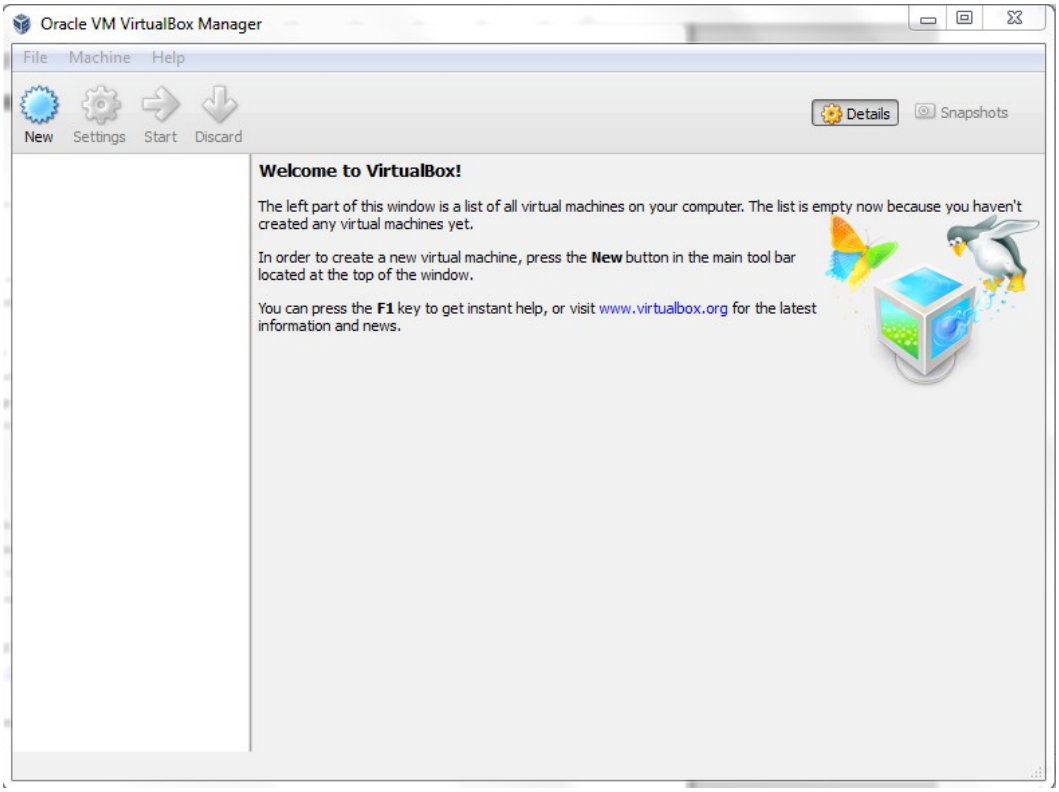
Running an operating system in a program such as Vmware or VirtualBox has a few advantages over installing to disk. Virtualization can help us:

1. Easily revert to snapshots if something breaks.
2. Set up our own internal networks.
3. Avoid rebooting a computer to try out an operating system.
4. Safely run software which may be vulnerable/dangerous.

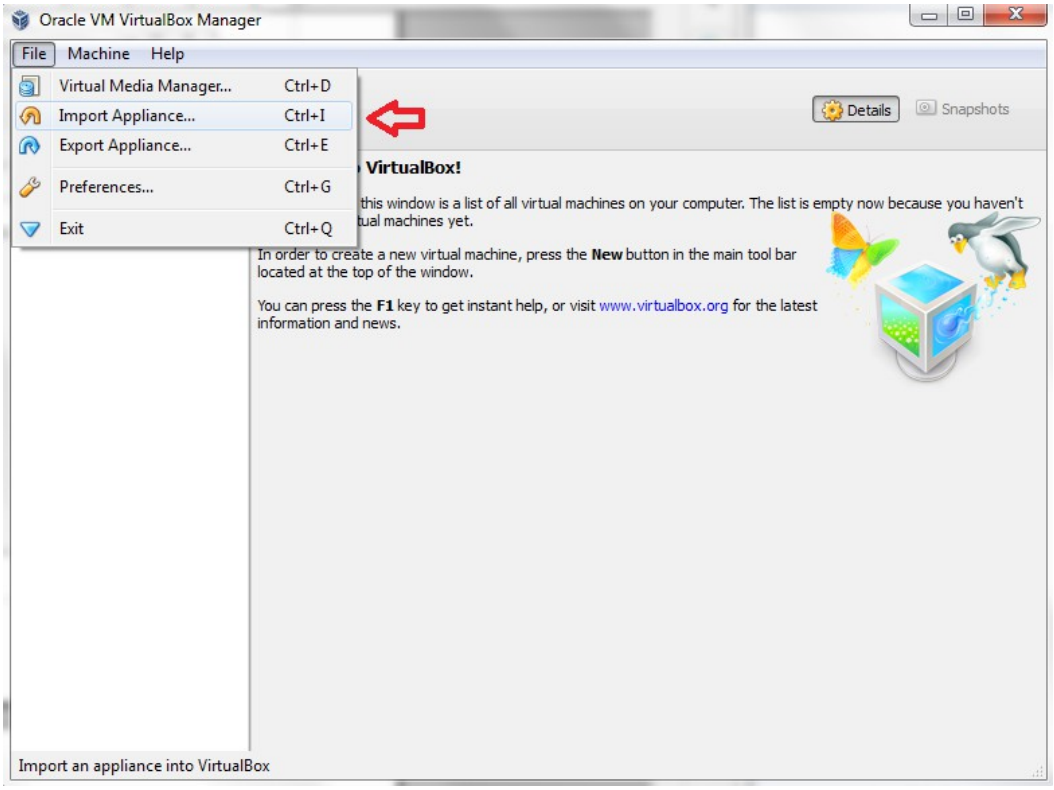
Exercises:
In this Module we will illustrate how to load an OVA file inside of VirtualBox. You can think of an OVA as a tar file for virtual machines. VirtualBox will also support installing an operating system directly from a disk file (ISO) but it takes a considerable amount of time to complete an instillation. We recommend you try this yourself later!

To get started, download and install VirtualBox from Oracle's website:
https://www.virtualbox.org/wiki/Downloads

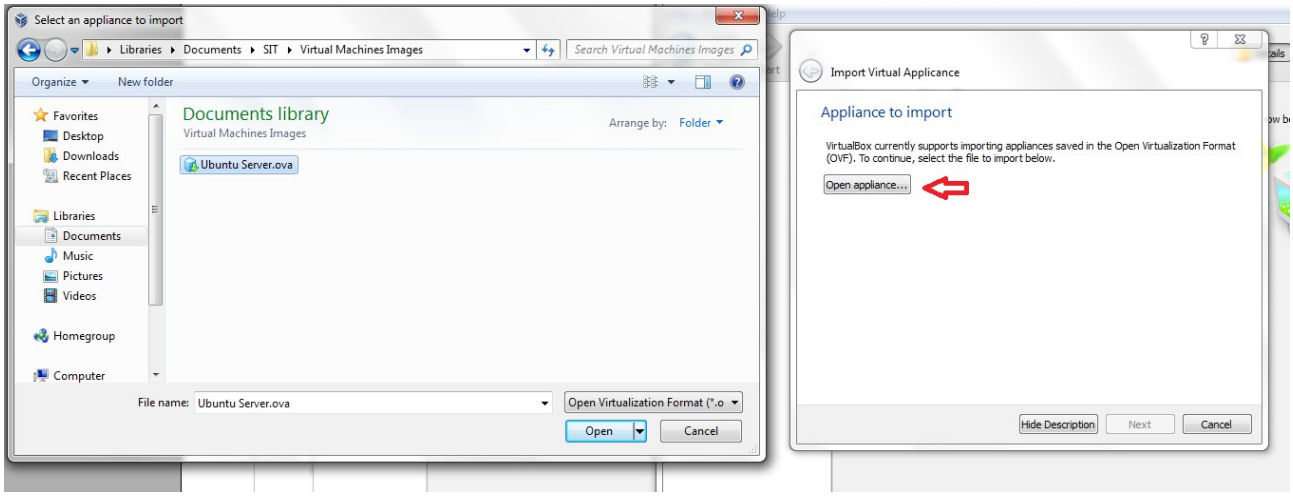
After the instillation has been completed, launch VirtualBox. You should get a window that looks like this:



Lets go ahead and import our our new virtual machine. We can do so by selecting "file -> import appliance" like in the screen shot below.



Now click the button "Open Appliance" and select the OVA you would like to load. You will need to browse to the folder where you are keeping your virtual machine images.



Now click next and import. When the appliance has finished importing you are ready to fire up your virtual machines!

Special Note:
In order to run Kali linux properly it is necessary to use KVM. On some computers "Enable Virtualization" is disabled from the computer's BIOS. If your unsure of how to enable this yourself ask an officer or someone at your table to assist you.

VM Archive sheet:
"Ubuntu Server.ova"
    user: sit
    password: sit
We will be using this distribution of linux for blue team exercises and tutorials on how to set up and administrate a secure system.

"Kali Linux.ova"
    user: root
    password: root
Kali Linux is packaged with lots of tools that can help us reverse engineer programs and perform penetration test. Make sure you know what a program does before you use it. It can be illegal to use some of the tools in the wrong context.

Future Application:
We will be using and distributing virtual machines a lot in SIT. Virtual machines will allow us to gain valuable experience in Exploiting vulnerable services and setting up secure systems. Although this is a Blue Team module, virtual machines will be used in future Red Team modules.